

RESPONSE UNDER 37 C.F.R. § 1.111  
U.S. Application. No.: 10/784,826  
Attorney Docket No: Q79934

### **REMARKS**

Claims 1-9 are all the claims pending in the application.

Claims 1-4, 6 and 7 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by the article titled “Nanocorundum - Advanced Synthesis and Processing” by Krell *et al.* (“Krell”).

Additionally, Claims 1-4 and 6-9 have been rejected under 35 U.S.C. § 103 as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103 as allegedly being obvious over Krell.

Applicants respectfully traverse.

Claim 1 recites calcining an aluminum salt.

The 5th full paragraph at page 1143 of Krell discloses that “nanocorundum powder was synthesized as described above with the following exceptions.” The synthesis “described above” in Krell involves hydrolyzing a solution prepared by dispersing seeds in an aqueous solution of aluminum nitrate. *See*, page 1142, lines 20-25 of Krell. Krell thereafter discloses calcining a seeded precursor. *See*, page 1143, lines 1-6.

Accordingly, Applicants respectfully submit that Krell fails to describe or suggest an aluminum salt. The seeded precursor disclosed in Krell is not an aluminum salt. The hydrolysis of aluminum nitrate results in aluminum hydroxide, which is not an aluminum salt. In this regard, the seeded precursor disclosed in Krell is not an aluminum salt.

Krell also fails to provide the motivation to replace the seeded precursor thereof with an aluminum salt. Krell fails to suggest eliminating the hydrolysis of aluminum nitrate. Krell fails

RESPONSE UNDER 37 C.F.R. § 1.111  
U.S. Application No.: 10/784,826  
Attorney Docket No: Q79934

to provide the motivation to shorten the synthesis thereof. Moreover, Krell teaches that “[a]n essential feature of the synthesis is the associated impact of the right choice of the precursor in combination with seeding.” *See*, page 1142, lines 20-21. In this regard, a person of ordinary skill in the art would not have been motivated to eliminate the hydrolysis thereof to replace the seeded precursor thereof with the aluminum salt.

Additionally, Claims 2-4 and 6-9 depend directly or indirectly from Claim 1. In this regard, Krell fails to anticipate or render obvious Claims 2-4 and 6-9 for at least the same reasons as Claim 1.

Claims 1-9 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over Claims 1-14 of copending Application No. 11/079,163 (“the ‘163 Application”).

In response, Applicants are submitting herewith a terminal disclaimer with respect to the ‘163 Application in an effort to advance the prosecution. The filing of the terminal disclaimer is not an admission of the propriety of the rejection, and raises neither a presumption nor an estoppel on the merits of the rejection. *See*, MPEP §804.02.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.111  
U.S. Application No.: 10/784,826  
Attorney Docket No: Q79934

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
Ken Sakurabayashi  
Registration No. 58,490

Date: September 1, 2006